PUNTON (John)

The Treatment and Prophylaxis in Insanity.

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The Treatment and Prophylaxis of Insanity.*

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I PRESUME it is unnecessary for me, at the outset, to say that I appreciate very highly the courteous invitation extended me by your committee, to read a paper before this very worthy society; and it is of special interest to me, because it was in this grand and philanthropic State of Illinois that I received my first tuition in the department of medicine, which will form the theme of my remarks.

In presenting the subject of "The Treatment and Prophylaxis of Insanity," it is not my intention to cover the entire field which the title of my paper would suggest, but simply direct your attention to a few facts connected with its most frequent and common forms, viz., melancholia.

Melancholia, as its name implies, is characterized by a state of profound emotional perversion of a depressing and sorrowful nature, the same being the offspring of a disordered state of the brain.

Of all the various forms of mental disease, states of mental depression are those that are nearest mental health, hence it appears as the sanest kind of insanity, which oftentimes renders its diagnosis the more difficult, especially in its incipiency.

It presents itself in a number of different ways, with various psychological and clinical symptoms, which admits of its classification, there being, according to Clouston, no less than eight different distinct varieties.

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In its more simple forms, however, all authors are agreed that it is more frequent and common than any other variety of insanity, and as such, is a very manageable and curable disease at home, not often requiring hospital or asylum treatment, and in this respect contrasting greatly with all the other kinds of insanity.

Its relative frequency renders its relation to the general practitioner of far greater importance than he is wont to allow, and it was this very fact that led me more especially to select it for your thoughtful consideration.

The department of medicine that has for its object the care and treatment of the insane is unfortunately, for itself, an exceedingly marked specialty, for when patients become insane they are invariably turned over to certain members of the profession, who devote their sole time and attention to this work.

When we remember, however, that no less an authority than Guslain claims (and his experience has been verified by many other of the later authors) that nearly all forms of insanity are preceded by some form of mental depression, the importance of a thorough knowledge of this particular variety of mental disease to the general practitioner is very apparent.

From an extended amount of practical observation and experience, covering a period of several years, I regret to state that this department of medicine receives less attention and its importance is more often ignored by the medical profession than any other branch of medical science.

Now, I hold that the time has come when we, as members of a great and growing scientific body, must of necessity insist upon a more thorough knowledge of mental disease among medical men.

It is surprising, as well as humiliating, to notice how many members of the profession admit, both by their words and actions, that they have given this subject little or no study, and in this way excuse themselves from their lawful, responsible duties.

In the earlier history of insanity, when mental diseases were confounded with superstition, and its etiology and pathology were still more or less imperfectly understood, no one could justly accuse the profession of being responsible for the rapid increase of the incurable insane, but to-day, with all the modern means of scientific research and a thorough knowledge of the brain and its functions, together with a more or less complete system of etiology and pathology of its diseased conditions, can we reasonably ask for such leniency or accept indifference as a sufficient plea for ignorance?

The present status of insanity should certainly demand the earnest attention of every individual medical practitioner of whatever school, and the public properly looks to us for practical aid in solving this most difficult problem.

When the subject of insanity appears on the programme at our medical society meetings, the members invariably decline to take part in the discussion, and offer as an excuse, their inability to do so on account of their lack of knowledge, having given it no thought or study, while many are so indifferent and even discourteous enough to leave the room, refusing to listen to such a dry and uninteresting topic, as they term it. Such conduct is a reflection on the boasted intelligence of the profession and should receive the censure it richly deserves.

In view of the importance of the subject, it is also a lamentable fact that, even at this late period of enlightenment, very few of our more reputable schools of medicine include the clinical study of insanity in their curriculum of studies, indeed, comparatively few teach it didactically, and when this is done, the whole subject is dismissed in about three abstract lectures.

Now I hold that it is impossible to teach the principles of this vast and intricate department of medicine in this crude manner, yet who can deny the truth of the assertion?

In commenting on this, Clouston says:

> How can we know that which we do not study, and how can the family physician give advice and sign certificates about a disease which, as a medical student, he has never seen or had explained to him clinically?
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> As well might you ask a man to give you a life insurance certificate that a patient was free from heart disease, who had never listened to a cardiac murmur.

The gross laxity of the college faculties in ignoring this important branch of study, is to a great extent responsible for the increased production of the more incurable forms of the disease, as well as the encouragement of indifference and ignorance among the members of the profession. A glance at statistics is sufficient to prove the grave responsibilities which rest upon us at the present time, and we are inexcusable, if we fail to furnish the means and measures which medical science and art place at our disposal for its speedy relief. In 1880 this country had a population of 50,155,783, and a total number of insane estimated at 56,205. The late census, which was probably the most careful and painstaking one ever made, furnishes me the following facts: With a population of 62,622,250, the total number of insane treated in both public and private institutions during the year 1889 was 97,535, which shows the marvelous increase in nine years of 41,330 or 73.53 per cent. In this connection it may prove interesting to note the number of insane treated in each of the three States represented by this society, during the same period, as follows:

ILLINOIS.—Jacksonville, treated (in the nine years)	3,340
Elgin	1,612
Anna	2,154
Kankakee	4,181
Cook Co., Chicago	4,724
Batavia (private)	277
Oak Lawn, Jacksonville (private; for 2 years)	47
Total for Illinois	16,335

Iowa.—	Mt. Pleasant	3,659
	Independence	3,511
	Clarinda (for two years)	323
	Total in Iowa	7,493
Missouri.—	St. Joseph	1,769
	Nevada	484
	St. Louis	2,478
	Fulton (not given)	
	St. Vincent's (private)	1,390
	Total for Missouri	6,121
	Grand Total	29,949

In order to have accurate statistics, I sent to the Census Bureau at Washington, and they kindly furnished me with a table showing the number of insane in each State of the Union in the year 1890.

This I analyzed and compared with a similar one issued in 1880, and found that the relative number of population for each insane person in sixteen States was, as follows:

	1880.	1890.	INCREASE.	DECREASE.
New York	one in, 360,	330,	8.3-10	.....
California	" 345,	336,	2.7-10	.....
Massachusetts	" 304,	367,	.....	1.7-10
Ohio	" 430,	470,	.....	8.5-10
Wisconsin	" 521,	480,	7.8-10	.....
Maine	" 421,	508,	.....	17.
Michigan	" 585,	562,	3.9-10	.....
Illinois	" 600,	570,	.5-10	.....
Iowa	" 639,	590,	7.6-10	.....
Minnesota	" 685,	591,	13.7-10	.....
Pennsylvania	" 516,	620,	.....	16.
Indiana	" 560,	663,	.....	15.
Kentucky	" 502,	681,	.....	25.
Missouri	" 655,	784,	.....	16.5-10
Kansas	" 1000,	796,	20.	.....
Nebraska	" 1005,	1136,	.....	11.5-10

This table shows that Illinois and Iowa have both increased, while Missouri has had the greatest decrease in any State of the Union in the ten years, with two

exceptions, viz., Maine and Kentucky. Kansas on the other hand has lost her former low standard and increased twenty per cent., while Nebraska still retains the supremacy of having less insane to the population than any other State.

Another important element in this connection is the annual expectancy of insanity or the number of persons liable to become insane each year. It has been demonstrated conclusively that out of a given number of population a definite ratio will become insane annually, which varies in number in the different States of the Union. For instance, in Missouri, we expect out of a population of a little over two and one-half millions nearly six hundred persons will become insane this year.

Applying this same rule to Illinois and Iowa, the former, out of a population of 3,826,351, can expect at least nine hundred new cases of insanity this year, while Iowa, with a population of 1,911,896, can look for about four hundred, which makes a grand total for the three States of at least 1,900 new cases of insanity liable to occur during the present year. All of these cases, therefore, constitute the recent or acute, and therefore, presumably curable cases of insanity.

Now all authorities are agreed that at least fifty per cent. of recent insanity is curable, and insist that the most important law governing its incurability is a lack of appreciation, or delay in securing prompt and appropriate treatment in its incipiency.

The great pathological law which holds good in other diseases, viz., the longer the duration of the disease the less the chance of recovery, is even more potent in the treatment of insanity than in any other disease.

Again, statistics prove that all the new cases of insanity rapidly fall into one of three classes, viz.:

1. Those in which the violence of the disease proves speedily fatal. These constitute a very small proportion, about five or six per cent.

2. Those who recover their mental health under prompt and appropriate treatment. These comprise about one-half, or fifty per cent. of the original number.

3. This leaves a little less than half or about forty-five per cent. of the new cases which arise annually to become chronic, the great majority of which are incurable and hence become a burden to the State the remainder of their lives.

A proper treatment of the recognized curable forms of insanity is therefore a matter of serious import, not only to members of the medical profession, but to all parties concerned.

Now, the treatment and prevention of insanity can be effective only in proportion as the causes are accurately ascertained and wisely avoided or removed.

The etiology of all forms of mental disease, it seems to me, can readily be grouped into two great classes, viz.:

1. Individual congenital defects.
2. Individual acquired defects.

The former comprises all those conditions pertaining to ancestral inheritance, while the latter embraces those which arise in the life history of the patient. Both of these may co-exist and often do so, indeed, in by far the greater number, still there are many cases in which the causes are so directly the result of personal injury or self-abuse, that they must be solely regarded as sufficient in themselves to cause the morbid mental changes, irrespective of inherited taints.

The chief cause of the congenital type and that which, in my judgment, underlies all the rest in producing and propagating states of mental depression, is the neurotic diathesis, or innate brain constitution of the individual. This manifests itself by nervous instability and defective innervation of the organic functions making itself felt by a constant tendency to degenerative changes in the nerve elements, rendering the subjects of it peculiarly liable to break down under certain stress of circumstances, which

would not specially affect another person inheriting a different constitution.

How this predisposition can be managed and modified is a very important practical question for us to solve. We may not, it is true, be able fully to explain its intricate pathology, but we do know that the number and diversity of inheritable deviations of structure and function are endless, and these are the problems we have to deal with in the treatment of melancholia.

Outbreaks of insanity in persons inheriting a favorable predisposition seem to be in some manner connected with the growth and process of evolution of the individual, more especially at the physiological crises. These abnormal conditions of inheritance are often the result of imperfect growth, defective nutrition, incorrect habits, injudicious education and modes of life of the parents, the general effects of which tend to lower the normal standard of health.

Fortunately, we can certainly declare that this predisposition is not a mysterious and necessarily fatal doom, certain at some time to overwhelm its victim. It is purely a physical defect which can be remedied and even cured, and loses half its horror when this is fully realized and understood.

Next to heredity is emotional excitement. It has been said that our emotions and affections are the mightiest factors in our lives, and they afford a vast field for the manifestation of nerve instability. "It is in the regulation of our moral nature," says Dr. Yellowlees, "by reason and duty and in controlling our fancies, impulses and passions that we tend to escape such penalties."

At this point we may pertinently inquire: From whom are the ranks of the insane mainly recruited? The answer is certainly, "From the men and women whose minds and hearts are untrained and ill-balanced, who are swayed by caprice and passion, and whose lives are ill-regulated and changeable. The access of insanity is often the ultimate wreck of a vessel without a helm.

Among the more prominent direct or acquired causes of insanity are the use and abuse of certain agents, such as alcohol, opium, excesses of all kinds, mental and physical strains, overstudy, excessive grief, domestic infelicity, malformation, disturbances of circulation, acute diseases and injuries of all kinds.

In most cases of insanity we are very apt to find several of these factors playing some part in inducing the morbid mental change, and the pathological phenomena so far discovered, all have for their basis some interference with the due nutrition, growth and renovation of the brain cells. While the true pathology of insanity is still in doubt, nevertheless, we are in possession of some facts which are essential aids in the treatment of the various forms.

Meynert considers melancholia as a symptomatic disease, arising from trophic disturbances of the anterior lobes of the brain. This results in a dejected and saddened expression with decreased activity of mind and body due to the anæmic condition of the cortical cells.

We are all aware that melancholia has for its chief symptoms mental depression, headache, and insomnia. Clouston says that mental depression is simply the functional expression of convolutional malnutrition. Cortical anæmia, therefore, is now recognized as being the chief pathological state we have to deal with in this, the most common form of insanity.

Now, clinically, we are all aware that an abnormally anæmic condition of any organ practically means starvation and which, if long continued, results in degenerative changes which rapidly become incurable.

Treatment.—The treatment of melancholia is therefore directed to the correction and maintenance of a healthy and proper blood supply to the brain.

Dr. Clouston says:

If the brain and body conditions that accompany, do not cause states of morbid mental depression, if they are those of trophic defi-

ciency, as they undoubtedly are, then it necessarily follows that what will remedy those conditions is indicated, and all things that will aggravate them must necessarily be avoided.

The means by which these ends may be secured, it seems to me, are fourfold:

1. By moral persuasion.
2. By the use of drugs.
3. By hygienic measures.
4. By mechanical appliances.

1. *Moral Treatment.*—The underlying principle in the moral treatment of the insane is that the patient should be treated as a reasoning being, in other words, from the moment he comes under your care, it should be assumed that he will understand more or less correctly all that is said and done to and for him.

He should, therefore, be treated as if you expected him to act rationally, and if he should fail, lead him by moral persuasion to do what you expect him to do. At the same time the fact of his being mentally deranged should be borne in mind.

All moral treatment should have for its highest aim, therefore, the calling into normal exercise and use the rational part of the disordered mind. It should be assumed by both the physician and nurse that the patient is capable, to some degree at least, of understanding the fact that he is ill, and your conduct towards him should frankly and consistently show this. It must also be remembered that the normal functions of the brain may be only temporarily deranged, and that in most cases some degree of normal function remains.

It seems beyond the comprehension of many persons that insanity deranges, rather than destroys the mind, in its incipient stages: Much therefore, depends upon your selection of a responsible nurse to carry out the principles herein enunciated. Another important step is the *isolation* of the patient whether treated at home or elsewhere: It is often with difficulty that the friends and relatives can be made to realize the necessity and

importance of this measure. But those of us who have devoted our time and attention to this study, know too well that the probabilities of recovery are much increased when the patient is committed to the care of strangers.

Much more might be said under this heading, but I hurry on to speak of the use of drugs in the treatment of melancholia.

2. *Use of Drugs.*—If mental depression is the functional expression of convolutional malnutrition, as I believe it is, then every therapeutic agent which tends to restore the healthy action of the brain is indicated. My friend and teacher, Dr. L. C. Gray, of New York, advises the use of opium in his late work for the direct treatment of melancholia.

Clouston says he performed a series of elaborate experiments with it in melancholia, and it always caused a loss of appetite and loss of weight in every case, and Dr. Mickle has confirmed these results.

In my own practice I seldom use it, as I believe it interferes with two of the most important functions for its speedy relief, viz., digestion and assimilation. Then again, often when called in consultation, I find many practitioners prescribe indiscriminately the bromides and chloral for the relief of insomnia, which is nearly always a troublesome symptom. If before using these drugs they would remember the pathological condition present, I am sure they would not employ them, for this purpose, in the treatment of melancholia.

Fortunately, we have at our command to-day many agents which are preferable to either of these for inducing sleep. Sulphonal is by far the best drug for this purpose.

The majority of melancholiacs are much below par in body weight, indeed this seems to be of more diagnostic importance than would at first appear, as there seems to be a marked relation between the two. Such remedies as tend to increase body weight are therefore urgently needed, as in my experience the physical improvement

precedes the mental. For this purpose I use quinine, iron, strychnia, phosphorus, arsenic, cod liver oil, mineral acids, vegetable bitters, hypophosphates, laxatives, whisky, malt preparations, etc., besides food of all kinds, especially *milk* and *eggs*. In many cases milk is my sheet anchor. I have given as much as three quarts a day for months at a time beside six eggs daily.

Blood enriching tonics and fattening diet are the most potent remedies for the relief of morbid mental depression, while the various hypnotics, such as sulphonal in doses of from ten to forty grains, paraldehyde from one-half to two drachms dissolved in chloric ether or cinnamon water, chloralamide from twenty to forty grains, somnal from one-half to one drachm, and very occasionally chloral are in my judgment the best agents to produce artificial sleep.

In the more restless forms of the disease sedatives are called for, and among the best of these are hyoscine in doses of one-hundred-and-fiftieth of a grain to one-eightieth of a grain, used either hypodermically or by the mouth; cannabis indica, lupulin and conium are also valuable agents.

All medicines that tend to lessen the appetite and impair digestion and nutrition are contra-indicated in this disease. The nervous diathesis at best does not put on fat naturally. We must, therefore, combat the tendency to innutrition by scientific dieting and appropriate therapeutics. Next in importance is proper hygienic measures.

3. *Hygienic Measures.*—In my experience moderate and suitable daily out-door exercise is indispensable in the treatment of melancholia. I make it a rule to keep my patients in the fresh air as much as possible. It is the best hunger and sleep producer I know of. Without this all other means fail. In some cases the rest and change that belongs to a sea voyage is preferable, but in others it is directly harmful; absolute change in habits and surroundings, rest from all mental labor,

judicious use of baths, pleasant and cheerful society, moderate and agreeable occupation and the substitution of pleasurable feelings for painful ones are the principal features to be aimed at in the hygienic treatment of the case.

4. *Mechanical Appliances.*—In the care and management of the insane, the enforcement of kind but firm discipline is essential for the best results. It must ever be borne in mind that you have an irresponsible being to deal with, therefore, you yourself must do the reasoning until such time as your patient is mentally responsible.

No class of cases require more tact and skill to properly manage than the more simple varieties of insanity, and the less they are removed from true sanity the more difficult the task.

Every precaution must be taken to guard against suicide, for in many instances they will resort to every conceivable method to accomplish such a purpose. Many refuse to eat or take medicine in the hope of terminating their lives by starvation. The use of the stomach or nasal tube is therefore indicated. If they are obstinate and pugnacious the temporary use of the strait-jacket is warrantable.

In referring to this, I am aware that many regard the use of mechanical restraint as cruel and unnecessary, but, after many years of observation and practical experience with the insane, I am compelled to state that I believe its judicious use to be not only necessary but humane.

The extra amount of help and appliances to be found in every well-equipped asylum is not often available in private practice, hence we are compelled to do the best we can with limited means and measures.

There are many other points which could be profitably referred to here, but my paper is now altogether too bulky, and before closing I desire to say a few words on prophylaxis.

Prophylaxis.—Insanity is a strictly physical disease, and as such, comes eminently within the range of preventive medicine.

No greater progress has been made during the present century in any department of philanthropy and science than in the direction of the better care of the insane. But a greater work remains to be done, a work that is even greater than cure or kindly care. It is that of prevention. The great question before us to-day is, not only what can be done for the chronic insane, but how can we *prevent insanity?*

We are all compelled to accept the science of prevention as a higher and greater power than the science of remedy. In order for this to be effective, it must necessarily reach back to the family life, the school life and even the nursery and cradle of the child.

The science of prevention, therefore, must be looked for outside the wards of a hospital.

The general practitioner, of all others, says Dr. Mann, is in a position to check the sources of insanity at their very beginnings:

> By carefully directing the mental and physical life of a pregnant woman, he may form the future mental complexion of the unborn child. He may watch over the child's brain during the early formative period of infancy and childhood, and so advise the parents, that they may guide the children in the paths which lead to mental stability.
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> He may recognize the insane or neurotic diathesis and by intelligently recognizing that such a person is more liable than others to mental disease, may apply a wise culture to the erring emotions and discipline to the conduct in the early years of life, while they are yet applicable and the fearful heritage may oftentimes be avoided.

Especially is the preventive aspect most important in the dieting, occupation, habits, education and general careers of such persons.

Too often an indifference is displayed by the family physician to give such advice and counsel as is necessary. Yet he is derelict in his duty if he fails to sound the alarm. Another important feature which comes within the province of the family physician is to guard *against*

a relapse in those who have already suffered from melancholia. From an extended amount of observation and experience in this direction, I do not hesitate to affirm that many cases could be saved from the wards of an asylum were this law more fully understood and obeyed, by both the physician and friends of the patient.

Bearing in mind the pathology of the disease and the loss of body weight which accompanies it, I advise all my recovered patients to weigh themselves at least once a month.

If there be the slightest loss from the normal standard I advise them to be on the alert and not be satisfied until it be regained; a loss of a few pounds in weight may be the first real warning of the disease returning, even though they may feel as well as usual. In addition to this I advise them to lead quiet, routine, systematic lives, taking regular periods of rest and repose as well as much out-of-door air and exercise, interspersed with suitable employment of both mind and body.

Self-control and prudence in observing the laws of health, watchfulness in avoiding excitements of all kinds and the cultivation of right and just views of life, constitute the strongest security against the return of the dreadful malady.

To sum up the whole matter, the treatment and prophylaxis of insanity consist, as Dr. Mann wisely says, in a proper recognition of known physiological, mental and moral laws, which when properly understood and obeyed result, not only in the highest development of the race, but in the highest type of civilization.